

ABSTRACT OF THE DISCLOSURE

A fuel processor system includes first and second reactors each having an inlet that receives fuel from a fuel supply and an outlet that discharges a reformat containing hydrogen. The reactors are operable to reform the fuel to form the reformates. The second reactor is coupled in parallel with the first reactor with the reformates produced by each combining to form a reformat flow. The first reactor can be an autothermal reforming reactor and the second reactor can be a steam reforming reactor. The first and second reactors are controlled differently to provide quick startup and transient capability while providing improved overall efficiency under normal operation.